

IN THE CLAIMS:

Please cancel claims 1, 2, 3, 15, 16, 17, 29, 30, 31, without prejudice.

Please amend claims 4, 18, and 32, as follows:

4. A data storage device comprising a computer useable medium having computer readable program code disposed therein for recording information on a data storage medium, the computer readable program code comprising a series of computer readable program steps to effect:

1 receiving a first command to record first information on said data storage medium;

2 receiving said first information, wherein said first information comprises a first header label group, first data, a first trailer label group;

1 moving said data storage medium in a first direction;

1 recording said first information beginning at a first time on said moving data storage medium;

1 receiving a first deferred conditional write tape mark command;

1 setting at a second time a first deferred conditional tape mark indicator;

3 writing said first header label group to said moving data storage medium;

3 writing a first tape mark adjacent said first header label group;

3 writing said first data adjacent said first tape mark;

3 writing a second tape mark adjacent said first data;

3 writing said first trailer label group adjacent said second tape mark;

3 writing a third tape mark adjacent said first trailer label group;

4 specifying a deferred conditional tape mark indicator time interval; and

LAW OFFICE OF
DALE F. REGELMAN, P.C.
4231 S. Fremont Street
Tucson, Arizona 85714

TEL 520-741-7636
FAX 520-746-9114

4 maintaining said first deferred conditional tape mark indicator during said deferred conditional tape mark indicator time interval.

18. A data storage and retrieval system comprising a data storage device, a data storage medium removeably disposed in said data storage device, and a host computer which provides first information to said data storage device, wherein said data storage device comprises a computer useable medium having computer readable program code disposed therein for recording information on a data storage medium storage medium, the computer readable program code comprising a series of computer readable program steps to effect:

receiving a first command to record first information on said data storage medium;

receiving said first information, wherein said first information comprises a first header label group, first data, and a first trailer label group;

moving said data storage medium in a first direction;

recording said first information on said moving data storage medium beginning at a first time;

receiving a first deferred conditional write tape mark command;

setting a first deferred conditional tape mark indicator at a second time;

writing said first header label group to said moving data storage medium;

writing a first tape mark adjacent said first header label group;

writing said first data adjacent said first tape mark;

writing a second tape mark adjacent said first data;

writing said first trailer label group adjacent said second tape mark;

writing a third tape mark adjacent said first trailer label group;

specifying a deferred conditional tape mark indicator time interval;
maintaining said first deferred conditional tape mark indicator during said deferred conditional tape mark indicator time interval.

32. A computer program product usable with a programmable computer processor having computer readable program code embodied therein for disposing information on a data storage medium using a data storage device comprising a read/write head, comprising:

computer readable program code which causes said programmable computer processor to receive a first command to record first information on said data storage medium;

computer readable program code which causes said programmable computer processor to receive said first information, wherein said first information comprises a first header label group, first data, and a first trailer label group;

computer readable program code which causes said programmable computer processor to move said data storage medium in a first direction;

computer readable program code which causes said programmable computer processor to record said first information on said moving data storage medium beginning at a first time;

computer readable program code which causes said programmable computer processor to receive a first deferred conditional write tape mark command;

computer readable program code which causes said programmable computer processor to set a first deferred conditional tape mark indicator at a second time;

computer readable program code which causes said programmable computer processor to write said first header label group to said moving data storage medium;

computer readable program code which causes said programmable computer processor

to write a first tape mark adjacent said first header label group;

computer readable program code which causes said programmable computer processor to write said first data adjacent said first tape mark;

computer readable program code which causes said programmable computer processor to write a second tape mark adjacent said first data;

computer readable program code which causes said programmable computer processor to write said first trailer label group adjacent said second tape mark;

computer readable program code which causes said programmable computer processor to write a third tape mark adjacent said first trailer label group;

computer readable program code which causes said programmable computer processor to specify a deferred conditional tape mark indicator time interval;

computer readable program code which causes said programmable computer processor to maintain said first deferred conditional tape mark indicator during said deferred conditional tape mark indicator time interval.

Please add new claims 43 through 53, as follows:

--43. A method to dispose information on a data storage medium using a data storage device, comprising the steps of:

providing a first command instructing said data storage device to record first information on said data storage medium;

providing said first information to said data storage device, wherein said first information comprises a first header label group, first data, and a first trailer label group;

disposing said data storage medium in said data storage device;

moving said data storage medium in a first direction;
recording said first information beginning at a first time on said moving data storage medium;
issuing a first deferred conditional write tape mark command;
setting at a second time a first deferred conditional tape mark indicator;
writing said first header label group to said moving data storage medium;
writing a first tape mark adjacent said first header label group;
writing said first data adjacent said first tape mark;
writing a second tape mark adjacent said first data;
writing said first trailer label group adjacent said second tape mark;
writing a third tape mark adjacent said first trailer label group;
specifying a deferred conditional tape mark indicator time interval;
maintaining said first deferred conditional tape mark indicator during said deferred conditional tape mark indicator time interval.

44. The method of claim 43, wherein said deferred conditional tape mark indicator time interval is between about 5 seconds and about 20 seconds.

45. The method of claim 44, wherein said deferred conditional tape mark indicator time interval is about 10 seconds.

46. The method of claim 43, further comprising the steps of:
providing a second command at a third time instructing said data storage device to record second information on said data storage medium, wherein the time interval between said second time and said third time is less than said deferred conditional tape mark indicator time

interval;

providing said second information to said data storage device;

resetting said first conditional deferred tape mark indicator;

recording said second information on said moving data storage medium;

issuing a second deferred conditional write tape mark command;

setting a second deferred conditional tape mark indicator at a fourth time;

moving said data storage medium only in said first direction during the time interval

between said first time and said fourth time.

47. The method of claim 46, wherein said second information comprises:

a second header label group;

second data; and

a second trailer label group.

48. The method of claim 47, further comprising the steps of:

writing said second header label group to said moving data storage medium adjacent
said third tape mark;

writing a fourth tape mark to said moving data storage medium adjacent said second
header label group;

writing said second data to said moving data storage medium adjacent said fourth tape
mark;

writing a fifth tape mark to said moving data storage medium adjacent said second data;

writing said second trailer label group to said moving data storage medium adjacent
said fifth tape mark; and

writing a sixth tape mark to said moving data storage medium adjacent said second trailer label group.

49. The method of claim 43, wherein said data storage device comprises a read/write head, further comprising the steps of:

providing a second command to said data storage drive, wherein said second command causes motion or synchronization of said data storage medium;

resetting said first deferred conditional tape mark indicator;

disposing a double tape mark on said data storage medium by writing a fourth tape mark adjacent said third tape mark;

moving said data storage medium in a second direction;

repositioning said read/write head between said third tape mark and said fourth tape mark.

50. The method of claim 49, further comprising the steps of:

determining if said double tape mark was successfully written to said tape;

determining if said read/write head was successfully positioned between said third tape mark and said fourth tape mark.

51. The method of claim 50, wherein said double tape mark was not successfully written to said tape, and wherein said read/write head was successfully repositioned between said third tape mark and said fourth tape mark, said method further comprising the step of indicating an UNWRITTEN DEFERRED TAPE MARK error message.

52. The method of claim 50, wherein said double tape mark was successfully written to said tape, and wherein said read/write head was not successfully repositioned

between said third tape mark and said fourth tape mark, said method further comprising the step of indicating a DATA CHECK/LOST POSITIONING error message.

53. The method of claim 50, wherein said double tape mark was not successfully written to said tape, and wherein said read/write head was not successfully repositioned between said third tape mark and said fourth tape mark, said method further comprising the steps of:

indicating a DATA CHECK/LOST POSITIONING error message; and

indicating an UNWRITTEN DEFERRED TAPE MARK error message.--